



Applicant Service Center
700 Fifth Avenue, 20th Floor
Seattle, WA 98124-4019
Phone: (206) 684-8850

Post-Permit Submittals – Shop Drawing Requirements

Applicants are responsible for insuring that their submittal meets these relevant standards prior to intake. The limited time of intake is not intended for applicants to complete their application materials. For additional requirements, see the [Post-Permit Submittals Screening Checklist](#).

There are different types of post-permit submittals: Blanket Permits, Revisions, Shop Drawings and Sprinkler Drawings. Post-Permit Shop Drawing Submittals for finalized or expired permits **will not** be accepted.

All design engineers, Engineers of Record and Architects of Record involved with shop drawing design, review and approval shall be registered professionals, meeting the Seattle Building Code (SBC) Section 202 definition.

After a building permit has been issued, post-permit shop drawing submittals related to that permit may be made directly to Plans Routing. If there is a doubt whether or not a post-permit submittal is necessary or will be accepted, consult the building code reviewer for the original permit.

Shop Drawings are required for the following building elements:

Curtain Wall Systems
Hold-down Systems (multi-story threaded rod systems only)
Metal Buildings, Metal Building Manufacturers Association (Note: shop drawings are required in addition to the metal building design drawings that are required at permit application)
Post-tensioned Concrete Systems
Precast Concrete Piles
Precast Prestressed Elements (planks, etc.)
Special Designs (large skylights, canopies, base isolators, etc.)
Spray Applied Fire Proofing
Stairs, Prefabricated (except when part of single family/duplex or Seattle Residential Code townhouses)
Steel Joists and Joist Girders, Steel Joist Institute
Storage Racks (greater than or equal to 6 feet in height)
Sunrooms (except when part of single family/duplex or Seattle Residential Code townhouses)
Wood Trusses, Metal Plate Connected (Note: shop drawings for Seattle Residential Code townhouse or single family/duplex structures do not require Seattle DCI review, however, the shop drawings must be provided at the project site)

Shop Drawings are NOT required for the following building elements:

Stairs, Prefabricated (when part of Seattle Residential Code townhouse or single family/duplex structures)
Steel Decking
Structural Steel
Sunrooms (when part of Seattle Residential Code townhouse or single family/duplex structures)
Wood Beams, Prefabricated, American Institute of Timber Construction
Wood Joist (plywood web)
Wood Panels, Prefabricated

Shop Drawings – Specific Requirements

All Shop Drawing Types:

- ☐ Every shop drawing sheet shall be stamped by the design engineer.
- ☐ Every shop drawing sheet shall be reviewed and stamped by the Engineer of Record (or Architect of Record for Spray Applied Fire Proofing).
-OR-
There shall be an index sheet stamped by the Engineer of Record (or Architect of Record for Spray Applied Fire Proofing). Along with the review stamp, the index sheet shall have a statement indicating which sheets have been reviewed and approved by the Engineer of Record. The stamp or statement shall substantially state that the shop drawings have been reviewed for connections and loading to the building structure and design criteria. Any sheet on which the Engineer of Record (or Architect of Record) has comments shall bear the review stamp along with the comments and sheet disposition status. No drawings should be submitted to the building official that still bears the disposition of "revise and resubmit" or similar language.
- ☐ When calculations are provided, the Engineer or Architect of Record shall review, approve, stamp, initial and date the cover sheet of the calculations. The cover sheet of the calculations shall also be stamped by the design engineer.

Curtain Wall or Exterior Cladding Systems:

- ☐ General size and configuration of system.
- ☐ For curtain wall systems used on low-rise, mid-rise and high-rise buildings, Seattle DCI requires that one of the following conditions is met:
 - 1) The curtain wall system shall be designed by a registered structural engineer licensed to practice in the State of Washington.
 - OR-
 - 2) The curtain wall system shall be designed by a registered professional (civil) engineer licensed to practice in the State of Washington provided the engineer has a minimum of 5-years of structural design experience in the curtain wall industry. A stamped letter from the design engineer requesting recognition as a specialty product design engineer and the design engineer's resume shall be submitted to Seattle DCI for review and approval.
- ☐ Where specialty anchoring systems are used to support the curtain wall on high-rise buildings:
For all exterior cladding systems installed on high-rise buildings, i.e. buildings having occupied floors located more than 75 feet above the lowest level of fire department vehicle access, the City of Seattle DCI requires that the curtain wall design engineer provide a current ICC-ES report for all specialty anchoring systems and/or devices used to connect those systems to the main building structure. It is further required that the design calculations clearly show that the anchor capacity provided or calculated per the provisions and tables of the ICC-ES report meet or exceed the worst case imposed gravity and lateral load combination to the connection as required. If the specialty anchoring system manufacturer does not have a current ICC-ES report for his particular product or products, he shall provide the curtain wall design engineer with test data and supporting calculations stamped by a registered professional engineer currently licensed to practice in the State of Washington. The curtain wall design engineer shall then:
 - 1) Review and approve the stamped test data and supporting calculations provided by the specialty anchoring system manufacturer;
 - 2) Provide his shop drawing review stamp on the cover sheet of the documents;
 - 3) Provide Seattle DCI with a stamped letter stating that he accepts the results of the stamped anchoring product test data and supporting calculations for the project;
 - 4) Verify in his calculations that the allowable loads given in the documentation provided by the specialty anchoring system manufacturer meet or exceed the worst case gravity and lateral load combination to the connections as required.

	The structural engineer of record for the building shall also review, approve, review stamp, initial and date the cover sheet of the specialty anchoring system manufacturer's test data and supporting calculations as well as review, approve and review stamp, initial and date the exterior cladding system shop drawings and the cover sheet of the supporting calculations as previously required.
<input type="checkbox"/>	<p><u>Where specialty anchoring systems are used to support exterior cladding on low-rise or mid-rise buildings:</u></p> <p>For all exterior cladding systems installed on low-rise or mid-rise buildings, Seattle DCI requires that the design engineer provide a current ICC-ES report or a report from certified listing agency for all specialty anchoring systems and/or devices used to connect those systems to the main building structure. It is further required that the design calculations clearly show that the anchor capacity provided or calculated per the provisions and tables of the ICC-ES report or the report of the certified listing agency, meet or exceed the worst case imposed gravity and lateral load combination to the connection as required. If a specialty anchoring system is used to support the exterior cladding system and a current ICC-ES report or a current report from certified listing agency cannot be provided for the particular product or products, the design engineer shall accept full responsibility for the specialty anchoring system by providing his stamp on each sheet of the design/shop drawings and the cover sheet of the calculations as normally required. The statement "By Others" will not be accepted at those locations where the specialty anchoring system connections are shown on the design/shop drawings. The design engineer shall also provide Seattle DCI with a Code Alternate form for review and approval stating his intention to use the specialty anchoring system to connect the exterior cladding to the main building structure, and clearly state he accepts full responsibility for their performance.</p>
Threaded Rod Hold-down Systems:	
<input type="checkbox"/>	Load table clearly outlining the required maximum hold-down forces for each shear wall type and location or loads clearly shown on the permit plan sheets, general details from the ICC-ES report for the hold-down system, any other details deemed necessary by the structural engineer, i.e., manufacturer's catalog cuts, unusual construction conditions, etc.
<input type="checkbox"/>	The hold-down system design engineer must be a licensed professional engineer in accordance with SBC 106.5.2.2. The hold-down system design engineer shall clearly indicate in the calculations that the allowable loads stated in the ICC-ES report meet or exceed the imposed worst case load combination for each load case provided by the structural engineer of record.
Metal Buildings:	
Note: Shop drawings for metal buildings are required to be submitted with the permit application.	
<input type="checkbox"/>	Complete metal building design, details, and specifications.
<input type="checkbox"/>	The design engineer for the metal building can be a civil engineer for one-story, light-framed metal buildings that are not unusually complex, do not have pre-cast cladding or an occupant load greater than 300. Note: separate engineers for the metal building and the foundation are permitted, provided the foundation engineer is the engineer of record for the project and is a licensed structural engineer. See CAM 304.
Post-tensioned Concrete Systems:	
<input type="checkbox"/>	Tendon length, tendon elongation, tendon identifier (color of tendon, tendon id#, group number, etc.), tendon quantity, tendon location, profiles, deck thickness, special banded details showing possible sequential stressing, details showing profiles of tendons through beams, details showing tendon and column interface, required details for bursting steel, tendon sweep tolerance details and additional tendon details pertaining to attachment to edge form and proper procedures for prestressing and stressing operations.
<input type="checkbox"/>	The design engineer can be a civil engineer if the engineer of record for the project is a licensed structural engineer and the PT design forces, clear cover, slab thickness, tendon grade, and f'c are included on the structural drawings.

<input type="checkbox"/>	Seattle DCI approved shop drawings shall be made available during required PT preconstruction meeting.
Precast Concrete Piles:	
<input type="checkbox"/>	Pile size, rebar, f'c.
<input type="checkbox"/>	The design engineer can be a civil engineer if the engineer of record for the project is a licensed structural engineer and the design forces and pile locations are included on the structural drawings.
Precast Prestressed Elements:	
<input type="checkbox"/>	Element manufacturer name, dimensions, reinforcement and tendon cover, design loads, and specifications.
<input type="checkbox"/>	Civil or structural engineer's seal and signature per SBC 106.5.2.2.
Special Designs:	
<input type="checkbox"/>	Size and configuration of special design element.
<input type="checkbox"/>	Design engineer can be a civil or structural engineer per SBC 106.5.2.2.
Spray Applied Fire Proofing:	
<input type="checkbox"/>	Fire rating and listing (ICC, UL, etc.) for fire proofing.
<input type="checkbox"/>	See <i>Director's Rules 6-99 and 7-99 for more information.</i>
Stairs, Prefabricated:	
<input type="checkbox"/>	Prefabricated stair and landing dimensions, and structural details.
<input type="checkbox"/>	Design engineer for stairs in non-high rise buildings can be a civil engineer per SBC 106.5.2.2. For stairs in high-rise buildings, Seattle DCI requires that one of the following conditions is met: 1) The prefabricated stairs shall be designed by a registered structural engineer licensed to practice in the State of Washington. -OR- 2) The prefabricated stairs shall be designed by a registered professional (civil) engineer licensed to practice in the State of Washington provided the engineer has a minimum of 5-years of experience designing stairs in high rise buildings. A letter from the design engineer requesting recognition as a specialty product design engineer and the design engineer's resume shall be submitted to Seattle DCI for review and approval.
Steel Joists and Joist Girders:	
<input type="checkbox"/>	Framing plans showing member identifications, member spacings, bridging locations and connections, and connections to structural supporting elements. See also SBC section 2206.4.
<input type="checkbox"/>	Individual member elevation drawings showing member designation and length, material specifications, chord and web sizes, design loads, and weld sizes and lengths of the web/chord connections. See also SBC section 2206.3
<input type="checkbox"/>	Design engineer can be a civil or structural engineer. Joists and joist girders that are not per SJI standard specifications shall be designed by the structural engineer of record for the project.
Storage Racks:	
<input type="checkbox"/>	Size and configuration of storage racks, design loads, and anchorage details.
<input type="checkbox"/>	Civil engineer's seal and signature when racks are up to 8' in height per SBC 106.5.2.2 or structural engineer's seal and signature when racks are over 8' in height.
Sunrooms:	
<input type="checkbox"/>	Configuration and size of sunroom and attachment details.
<input type="checkbox"/>	Design engineer can be a civil engineer.
Wood Trusses, Metal Plate Connected:	
<input type="checkbox"/>	Configuration, size and spacing of wood trusses.
<input type="checkbox"/>	Design engineer can be a civil engineer.